

### **REMARKS**

Applicant's counsel thanks the Examiner for the continued thorough examination of the present application.

Claim 17 has been canceled without prejudice, thereby obviating the drawing rejections under 37 CFR § 1.83(a).

Claims 1, 3, 7, 14 and 16 have been amended, and new claims 18 and 19 have been added to more clearly describe the invention. No new matter has been entered. The amendments to claims 3, 7 and 14 are for consistency and clarity only, and do not affect the scope of these claims. For the Examiner's convenience, basis for the amendments to claims 1 and 16, and for the new claims 18 and 19 can be found in the application as filed as follows:

<u>Claim</u>	<u>Basis found at</u>
1, 16	Page 3 lines 27-29; Page 4 lines 10-12; Page 5 lines 19-23.
18, 19	Page 5 lines 20-23 and lines 33-35.

Claims 1 and 16 are rejected under 35 USC § 103(a) as being allegedly obvious over Ahlgren in view of Fukai. Claim 1 has now been amended to positively recite "the first seal is formed by heating the arc tube body in the vicinity where the first seal is to be formed while simultaneously rotating the arc tube body along its axis." Claim 16 has also been amended to positively recite "rotating the quartz tube along its axis" while heating at the desired location to form each of the seals. See claims 1 and 16 as amended above. Neither of the applied references either discloses or suggests the method step of rotating the arc tube body along its axis as

now recited in each of claims 1 and 16. Therefore, it is respectfully submitted that each of these independent method claims is now allowable.

Claim 12 has also been rejected under 35 USC § 103(a) over Ahlgren and Fukai. Respectfully, this rejection is traversed. Claim 12 recites a method "wherein the doses of mercury and of halide compound are placed in the arc tube body after the first and second electrode assemblies are placed in the arc tube body."

Conversely, both Ahlgren and Fukai teach methods where the mercury or other discharge compound is provided after insertion of the first electrode, but prior to insertion of the second electrode. See, e.g., Ahlgren Figs. 3(f) and 3(h) showing respectively insertion of halide pellets and mercury via stainless steel tubing 38 prior to insertion of the second electrode. (Ahlgren at col. 15 lines 26-36). See also, e.g., Fukai Fig.1(3) and col. 5 lines 22-28 where it is disclosed that

After the glass tube 4 that has been through the first pinch sealing process...has been turned upside down, not only chemicals 14 are supplied into the spherical portion 4a from the not yet pinch-sealed upper opening end portion of the glass tube 4, but also the second electrode assembly unit 6 is inserted into the glass tube 4....

In view of the above, it is respectfully submitted that claim 12 is now allowable as written, and it is respectfully requested that the Examiner withdraw the rejection of this claim.

New claims 18 and 19 have been added as dependent from claims 1 and 16 respectively. Each of these claims recites that the seal(s) is/are "formed as a result of the lower gas pressure within the arc tube body causing the arc tube body, on heating, to collapse, thereby forming" the seal(s). The Examiner has recognized that Ahlgren "does not disclose [to] reduce the gas pressure within the arc tube body


by evacuating the gas,” Office action, page 6, and relies instead on Fukai to supply the necessary teaching. However, in Fukai, the seals are not formed by collapsing the glass tube as a result of lower internal pressure as recited in claims 18 and 19. Instead, Fukai teaches that “the portion of the glass tube 4 that has been softened by heating is pinch-sealed by pressing such portion in all directions with a pincher 22.” Fukai, col. 5 lines 5-9. See also Fukai, Figs. 1(2), 1(5), 2(e), 5(d) and 6(c), all showing pinch seals being formed by exterior compression using pincher 22. Accordingly, it is respectfully submitted that claims 18 and 19 are also allowable over the cited prior art.

In view of the above, claims 1 and 16 as amended, as well as claims 12, 18 and 19 are now all allowable over the cited references, all rejections of these claims having been overcome. All remaining claims are dependent claims, and are also now believed to be allowable on that basis.

Therefore, entry and consideration of the present Amendment in the above-captioned patent application is respectfully requested.

If there are any additional fees resulting from this communication, please charge same to our Deposit Account No. 16-0820, our Order No. 33151.

Respectfully submitted,  
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